# (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

#### (19) World Intellectual Property Organization International Bureau



# ENNIOS O COLUS (NEO ELID ELID EN ELID EN ELIDE (NEO ELIDE NEO ELIDE COLUS (NEO ELIDEC COLUS (NEO ELID COLUS (N

#### (43) International Publication Date 28 April 2005 (28.04.2005)

PCT

### (10) International Publication Number WO 2005/038039 A2

(51) International Patent Classification7:

C12Q

(21) International Application Number:

PCT/US2004/033818

- (22) International Filing Date: 13 October 2004 (13.10.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/510,762

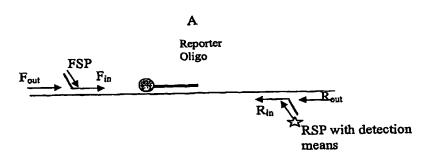
13 October 2003 (13.10.2003)

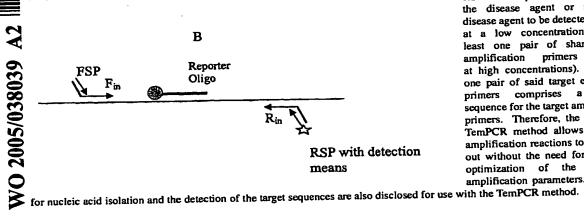
- (71) Applicant (for all designated States except US): GENACO BIOMEDICAL PRODUCTS, INC. [US/US]; 2707 Artie Street, Building 100, Suite 18, Huntsville, Alabama 35805 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): HAN, Jian [CN/US]; 2707 Artie Street, Building 100, Suite 18, Huntsville, Alabama 35805 (US).

- (74) Agent: PETERSON, T. Gregory; Bradley Arant Rose & White LLP, 1819 Fifth Avenue North, Birmingham, Alabama 35203-2104 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DB, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND KIT FOR PRIMER BASED AMPLIFICATION OF NUCLEIC ACIDS





(57) Abstract: Disclosed is a novel method for diagnosis or differential diagnosis of disease agents and secondary disease agents. The method disclosed uses a novel termed strategy amplification TemPCR to allow sensitive and specific amplification of target sequences from any disease agents and/or secondary disease agent whose nucleic acid sequence is The TemPCR method known. utilizes at least one set of target enrichment primers specific for the disease agent or secondary disease agent to be detected (present at a low concentration) and at least one pair of shared target (present At least at high concentrations). one pair of said target enrichment primers comprises a binding sequence for the target amplification primers. Therefore, the use of the TemPCR method allows multiplex amplification reactions to be carried out without the need for empirical optimization of the multiplex amplification parameters. Methods